



March 10, 2006

EPA Region 5 Records Ctr.



258588

✓ Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

**Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order
(UAO) Groundwater Operable Unit
Monthly Report; February 1 - February 28, 2006 Reporting Period**

Dear Nabil:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period February 1 – February 28, 2006.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven D. Smith". The signature is fluid and stylized, with a long horizontal stroke at the end.

Steven D. Smith
Project Coordinator

cc: Ken Bardo, - U. S. EPA
Mayor Sauget - Sauget, IL
Sandra Bron – IEPA
Mike Coffey - USFWS
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor Frank Bergman – Cahokia
L. Glen Kurowski - Monsanto
Cathleen Bumb – Solutia
Linda Tape - Husch & Eppenberger
Richard Williams – Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report: March 10, 2006
Period Covered: February 1 - February 28, 2006

Work Performed During the Reporting Period

General Site Work

- During the Pre-Final Inspection conducted on June 28, 2005, the one item identified as requiring completion before the Final Inspection was a pressure test on the discharge pipeline. That test was successfully completed on July 14, 2005 and on July 19, 2005 the Agency was requested by e-mail to complete a Final Inspection and issue a Construction Complete notice. At a meeting held on January 12, 2006, it was agreed that a draft of the Final Completion Report would be submitted to the Agency and that submission was made on February 17, 2006.
- Comments on the Operations and Maintenance Plan, which was submitted to the Agency on June 21, 2005, were received on September 20th. Those comments are being reviewed and responses will be prepared and submitted by the end of March, together with a revised O&M Plan.

Groundwater Treatment

- Interim Operating Period (IOP) III began on February 1, 2006 and will continue for at least 90 days until April 30, 2006. The intention is to obtain additional operating data over a wide range of river stages.
- For the entire month of February, the system was operated to maintain the total pumping rate equal to the computed inflow rate, based on the average of the gradients measured in four pairs of piezometers placed immediately upgradient of the Site R landfill. The control system was programmed to operate wells EW-1 and EW-3 at the same pumping rate, with well EW-2 shut down.
- On February 8th, the distances between piezometers 5U and 5D and between 8U and 8D were changed to reflect the orthogonal distances between potential lines through each of these piezometer pairs. This change results in the gradient being computed between two equipotential lines, one of which passes through the

upgradient member of the piezometer pair with the second passing through the downgradient member of the pair.

- On February 9th, the formula for calculating the average gradient was revised such that only the gradients from piezometer pairs PZ-5 and PZ-8 are used to compute the average gradient.
- The results for the first quarter groundwater samples of the performance monitoring wells have been validated and the validated results were submitted to the Agency on February 8th. The unvalidated results were submitted on October 27th. The results from the second quarter groundwater samples are being validated and will be reported to the Agency in March.
- Third quarter groundwater samples are being analyzed.
- Water level and pumping data for the month of February are attached.

Schedule

The Agency is currently reviewing various submissions to determine if construction is complete.

Submittals During Reporting Period

- The draft Final Completion Report was submitted to the Agency.
- The validated results of the first quarterly groundwater sampling event were submitted.

Work Scheduled for Next Reporting Period

- Continue pumping and treating groundwater using the new control program.
- Continue IOP III.
- Submit validated results from the second quarter groundwater performance monitoring samples.
- Begin validation of the results of the third quarter groundwater samples from the performance monitoring wells.
- Obtain and begin analyzing 2006 first quarter groundwater samples from the performance monitoring wells and the 2006 first semiannual sediment and surface water samples.

PUMPING DATA

		PUMPING RATE						GROUNDWATER LEVELS									
		Computed															
Date/Time		Q	Total Q	EW-1 Q	EW-2 Q	EW-3 Q	SWL	PZ-5U	PZ-5D	Delta	PZ-6U	PZ-6D	Delta	PZ-7U	PZ-7D	Delta	PZ-8U
02/01/2006	Daily Average	426.56	428.00	213.80	0.38	213.82	382.59	384.68	384.29	-0.39	384.45	384.40	-0.05	384.61	384.12	-0.49	384.48
02/02/2006	Daily Average	457.19	456.12	228.05	0.00	228.06	382.09	384.73	384.33	-0.40	384.53	384.44	-0.10	384.68	384.19	-0.49	384.54
02/03/2006	Daily Average	478.32	478.20	238.90	0.35	238.95	382.09	384.70	384.27	-0.44	384.48	384.36	-0.12	384.61	384.11	-0.50	384.47
02/04/2006	Daily Average	480.75	482.01	241.00	0.00	241.01	382.17	384.73	384.27	-0.46	384.47	384.35	-0.12	384.61	384.11	-0.50	384.48
02/05/2006	Daily Average	439.71	446.68	223.21	0.00	223.46	382.27	384.74	384.34	-0.40	384.52	384.42	-0.10	384.63	384.17	-0.46	384.54
02/06/2006	Daily Average	462.43	463.18	231.59	0.00	231.59	382.09	384.72	384.28	-0.43	384.49	384.38	-0.11	384.61	384.13	-0.48	384.51
02/07/2006	Daily Average	449.01	449.04	224.52	0.00	224.52	381.87	384.78	384.34	-0.44	384.55	384.45	-0.10	384.64	384.17	-0.47	384.53
02/08/2006	Daily Average	482.11	464.87	232.63	0.00	232.24	381.74	384.74	384.28	-0.46	384.53	384.44	-0.09	384.66	384.19	-0.47	384.56
02/09/2006	Daily Average	534.53	532.57	266.28	0.00	266.29	381.69	384.71	384.29	-0.42	384.51	384.39	-0.12	384.67	384.15	-0.51	384.51
02/10/2006	Daily Average	616.17	613.90	306.95	0.00	306.94	381.07	384.72	384.19	-0.53	384.48	384.36	-0.12	384.65	384.11	-0.54	384.47
02/11/2006	Daily Average	651.70	652.37	326.20	0.00	326.17	380.67	384.53	384.04	-0.49	384.33	384.18	-0.15	384.48	383.97	-0.51	384.37
02/12/2006	Daily Average	654.97	655.26	327.64	0.00	327.62	380.25	384.48	383.94	-0.54	384.21	384.09	-0.12	384.38	383.88	-0.50	384.24
02/13/2006	Daily Average	653.90	652.88	326.44	0.00	326.43	380.40	384.44	383.92	-0.52	384.20	384.06	-0.13	384.37	383.85	-0.52	384.22
02/14/2006	Daily Average	659.03	660.59	330.32	0.00	330.27	380.45	384.39	383.86	-0.53	384.16	384.02	-0.14	384.33	383.80	-0.53	384.16
02/15/2006	Daily Average	663.33	662.32	331.16	0.00	331.16	380.25	384.35	383.79	-0.56	384.12	383.99	-0.12	384.27	383.75	-0.53	384.10
02/16/2006	Daily Average	662.50	664.42	332.21	0.00	332.21	380.78	384.33	383.79	-0.53	384.08	383.94	-0.14	384.23	383.71	-0.52	384.07
02/17/2006	Daily Average	573.21	585.06	289.79	5.76	289.51	381.63	384.28	383.79	-0.49	384.01	383.88	-0.13	384.14	383.63	-0.51	384.01
02/18/2006	Daily Average	537.57	536.79	268.40	0.00	268.39	381.63	384.36	383.94	-0.42	384.14	383.99	-0.15	384.27	383.76	-0.51	384.15
02/19/2006	Daily Average	688.81	681.59	340.78	0.00	340.81	379.21	384.32	383.75	-0.57	384.11	383.97	-0.14	384.30	383.76	-0.54	384.12
02/20/2006	Daily Average	821.38	820.65	410.32	0.00	410.33	378.06	384.12	383.43	-0.68	383.93	383.77	-0.16	384.14	383.56	-0.58	383.89
02/21/2006	Daily Average	866.24	864.73	432.38	0.00	432.35	378.09	384.03	383.29	-0.73	383.81	383.65	-0.16	384.02	383.43	-0.59	383.76
02/22/2006	Daily Average	899.02	897.11	448.49	0.12	448.50	378.03	383.93	383.17	-0.76	383.71	383.53	-0.19	383.93	383.32	-0.61	383.67
02/23/2006	Daily Average	870.96	872.09	436.05	0.00	436.04	378.29	383.81	383.09	-0.72	383.62	383.43	-0.19	383.80	383.20	-0.60	383.54
02/24/2006	Daily Average	778.21	782.16	391.10	0.00	391.05	379.35	383.85	383.22	-0.64	383.64	383.49	-0.15	383.83	383.25	-0.58	383.60
02/25/2006	Daily Average	704.28	706.08	353.05	0.00	353.03	380.34	383.83	383.25	-0.58	383.61	383.46	-0.15	383.76	383.21	-0.55	383.57
02/26/2006	Daily Average	642.83	644.62	322.33	0.00	322.29	380.44	383.95	383.39	-0.56	383.70	383.56	-0.15	383.85	383.31	-0.53	383.68
02/27/2006	Daily Average	688.15	683.51	346.37	5.79	346.28	379.98	384.01	383.44	-0.57	383.78	383.64	-0.13	383.96	383.42	-0.54	383.78
02/28/2006	Daily Average	689.23	690.20	345.12	0.00	345.08	379.87	383.92	383.36	-0.56	383.69	383.55	-0.14	383.85	383.32	-0.53	383.67

Date/Time		PZ-8D	Delta	PZ-1_OUTSI DE	PZ-1_INSIDE	PZ-2_OUTSI DE	PZ-2_INSIDE	PZ-3_OUTSI DE	PZ-3_INSIDE	PZ-4_OUTSI DE	PZ-4_INSIDE
02/01/2006	Daily Average	383.87	-0.61	382.47	381.90	381.45	383.50	381.78	382.81	382.42	382.97
02/02/2006	Daily Average	383.88	-0.66	382.34	381.90	381.02	383.55	381.39	382.86	382.26	383.00
02/03/2006	Daily Average	383.80	-0.67	382.31	381.73	380.94	383.41	381.30	382.69	382.17	382.85
02/04/2006	Daily Average	383.83	-0.65	382.38	381.73	381.01	383.40	381.39	382.70	382.26	382.85
02/05/2006	Daily Average	383.91	-0.62	382.28	381.89	381.16	383.54	381.51	382.84	382.31	383.00
02/06/2006	Daily Average	383.86	-0.64	382.34	381.74	380.96	383.45	381.35	382.75	382.25	382.92
02/07/2006	Daily Average	383.90	-0.63	382.27	381.86	380.80	383.53	381.19	382.83	382.18	382.99
02/08/2006	Daily Average	383.85	-0.70	382.20	381.81	380.67	383.54	381.06	382.85	382.09	383.00
02/09/2006	Daily Average	383.83	-0.68	382.20	381.62	380.67	383.40	381.05	382.72	382.09	382.86
02/10/2006	Daily Average	383.74	-0.73	381.88	381.42	380.13	383.26	380.53	382.59	381.81	382.69
02/11/2006	Daily Average	383.54	-0.82	381.62	381.14	379.75	383.03	380.17	382.32	381.55	382.44
02/12/2006	Daily Average	383.45	-0.79	381.36	381.01	379.35	382.91	379.79	382.21	381.27	382.31
02/13/2006	Daily Average	383.41	-0.81	381.40	381.02	379.44	382.91	379.89	382.22	381.30	382.32
02/14/2006	Daily Average	383.35	-0.80	381.39	380.91	379.50	382.81	379.93	382.14	381.30	382.23
02/15/2006	Daily Average	383.30	-0.79	381.26	380.86	379.32	382.77	379.75	382.11	381.17	382.18
02/16/2006	Daily Average	383.27	-0.81	381.44	380.82	379.70	382.73	380.08	382.01	381.32	382.13
02/17/2006	Daily Average	383.33	-0.68	381.82	380.83	380.42	382.69	380.78	381.95	381.66	382.11
02/18/2006	Daily Average	383.48	-0.67	381.96	381.16	380.52	382.97	380.90	382.26	381.84	382.43
02/19/2006	Daily Average	383.29	-0.83	380.87	380.92	378.54	382.80	379.05	382.16	380.94	382.23
02/20/2006	Daily Average	382.90	-0.99	380.11	380.36	377.34	382.40	377.85	381.75	380.16	381.75
02/21/2006	Daily Average	382.72	-1.04	380.04	380.09	377.35	382.19	377.84	381.52	380.04	381.51
02/22/2006	Daily Average	382.59	-1.07	379.91	379.89	377.27	382.01	377.77	381.36	379.91	381.35
02/23/2006	Daily Average	382.49	-1.05	379.94	379.71	377.41	381.87	377.88	381.18	379.88	381.20
02/24/2006	Daily Average	382.65	-0.94	380.49	380.01	378.36	382.09	378.80	381.36	380.39	381.43
02/25/2006	Daily Average	382.71	-0.85	380.91	380.11	379.21	382.12	379.59	381.38	380.76	381.49
02/26/2006	Daily Average	382.92	-0.76	381.11	380.41	379.43	382.34	379.84	381.61	381.02	381.75
02/27/2006	Daily Average	382.95	-0.84	380.92	381.27	379.06	382.43	379.46	381.76	380.88	381.84
02/28/2006	Daily Average	382.83	-0.84	380.73	381.67	378.90	382.28	379.31	381.60	380.71	381.67